



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,191	11/21/2003	Chao Kan	139160USNP	3236
24587	7590	12/10/2008		
ALCATEL LUCENT INTELLECTUAL PROPERTY & STANDARDS 3400 W. PLANO PARKWAY, MS LEGL2 PLANO, TX 75075			EXAMINER BURGESS, BARBARA N	
			ART UNIT	PAPER NUMBER
			2457	
			MAIL DATE	DELIVERY MODE
			12/10/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/719,191

**Applicant(s)**

KAN ET AL.

**Examiner**

BARBARA N. BURGESS

**Art Unit**

2457

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is in response to Request for Continuation Examination (RCE) filed September 24, 2008. Claim 6 has been cancelled as requested by Applicant. Claims 1-5, 7-20 are presented for further examination.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. (hereinafter "Burt", US Patent Publication Application 2005/0005202 A1) in view of Aaron et al. (hereinafter "Aaron", US Patent Publication 2003/0188191 A1).

As per claim 1, Burt discloses a router for coupling into a computer network along which network traffic flows in a form of packets, wherein the network comprises a management system, the router comprising:

- at least one monitoring circuit coupled to the network, wherein the at least one monitoring circuit is operable to examine packets communicated to the router and to provide network information associated with selected ones of the examined packets (paragraphs [0022-0023, 0038]);

- circuitry for processing the provided network information based on a second type of analysis requested by at least one node coupled to the network (paragraphs [0117-0118]);
- circuitry for including processed network information based on the second type of analysis into one or more packets (paragraphs [0119, 0121]);
- circuitry for transmitting the one or more packets with processed network information based on the second type of analysis over a data path in the network to the at least one node coupled to the network, wherein the at least one node is included within a second management system of a second network and is outside of the management system (paragraphs [0122-0123])

Burt does not explicitly disclose:

- processing provided network information based on a first type of analysis requested by the first management system;
- transmitting processed network information based on the first type of analysis to the first management system.

However, the use and advantages of processing and transmitting processed information based on a first type of analysis is well-known to one of ordinary skill in the art at the time the invention was made as evidenced by Aaron (paragraphs [0030-0031, 0050-0051, 0062]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Aaron's processing and

transmitting based on a first type of analysis in Burt's router in order to detect anomalies and determined which computers will be affected by the anomaly in the future.

As per claim 2, Burt discloses the router of claim 1, wherein the management system comprises a plurality of nodes operable to communicate according to a network management system protocol (paragraphs [0017, 0030]).

As per claim 7, Burt discloses the router of claim 1 wherein the circuitry for transmitting is further for transmitting the one or more packets along the network to at least one node that is part of the management system (paragraphs [0035-0036]).

As per claim 8, Burt discloses the router of claim 1, wherein the circuitry for transmitting is further for transmitting the one or more packets along the network to a plurality of nodes coupled to the network; and  
wherein the plurality of nodes are outside of the management system.  
(paragraphs [0022-0024, 0027]).

As per claim 9, Burt discloses the router of claim 1, and further comprising:

- wherein the circuitry for transmitting is for transmitting a first set of the one or more packets along the network to a first respective node coupled to the network  
(paragraphs [0024, 0119]);

- wherein the circuitry for transmitting is for transmitting a second set of the one or more packets along the network to a second respective node coupled to the network (paragraph [0023]); and
- wherein the first respective node and the second respective node are outside of the management system (paragraphs [0023, 0026, 0131]).

As per claim 10, Burt discloses the router of claim 9, wherein the first set of the one or more packets corresponds to a first type of analysis performed by the circuitry for processing the provided network information; and  
wherein the second set of the one or more packets corresponds to a second type of analysis, different from the first type of analysis, performed by the circuitry for processing the provided network information (paragraphs [0039-0117]).

As per claim 11, Burt discloses the router of claim 1, wherein the at least one monitoring circuit is operable to examine packets in response to a set of criteria; and  
wherein the selected ones of the examined packets correspond to packets that satisfy the set of criteria (paragraphs [0117, 0123]).

As per claim 12, Burt discloses the router of claim 1 wherein the network comprises the global Internet (paragraph [0030]).

As per claim 13, Burt discloses the router of claim 1 wherein the network is selected from a group consisting of a cell-based network and a packet-based network (paragraph [0030]).

As per claim 14, Burt discloses the router of claim 1 wherein the provided information comprises information copied from the examined packets (paragraph [0031]).

As per claim 15, Burt discloses the router of claim 1 wherein the provided information comprises information not included in the examined packets (paragraph [0038]).

As per claim 16, Burt discloses the router of claim 1 wherein the provided information is selected from the set consisting of packet time of arrival data, port arrival data, number of discarded packets, error packets, port utilization, and buffer utilization (paragraph [0026]).

As per claim 17, Burt discloses the router of claim 1 and further comprising a plurality of routers, and wherein each router in the plurality of routers is for coupling into the computer network, and wherein each router of the plurality of routers comprises:

- at least one monitoring circuit coupled to the network, wherein the at least one monitoring circuit is operable to examine packets communicated to the router and to provide network information associated with selected ones of the examined packets (paragraphs [0022-0023, 0038]);

- circuitry for processing the provided network information based on a second type of analysis requested by at least one node coupled to the network (paragraphs [0117-0118]);
- circuitry for including processed network information based on the second type of analysis into one or more packets (paragraphs [0119, 0121]);
- circuitry for transmitting the one or more packets with processed network information based on the second type of analysis over a data path in the network to the at least one node coupled to the network, wherein the at least one node is included within a second management system of a second network and is outside of the management system (paragraphs [0122-0123])

Burt does not explicitly disclose:

- processing provided network information based on a first type of analysis requested by the first management system;
- transmitting processed network information based on the first type of analysis to the first management system.

However, the use and advantages of processing and transmitting processed information based on a first type of analysis is well-known to one of ordinary skill in the art at the time the invention was made as evidenced by Aaron (paragraphs [0030-0031, 0050-0051, 0062]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Aaron's processing and

transmitting based on a first type of analysis in Burt's router in order to detect anomalies and determined which computers will be affected by the anomaly in the future.

As per claim 18, Burt discloses the router of claim 17 wherein at least two of the routers in the plurality of routers are operable to include respective processed information into a respective set of one or more packets for transmission to a same destination node (paragraph [0022]).

As per claim 19, Burt discloses the router of claim 18 wherein the same destination node is outside of the management system (paragraphs [0022-0024, 0027]).

As per claim 20, Alexander discloses a method of operating a router that is coupled into a computer network along which network traffic flows in a form of packets, wherein the network comprises a management system, the method comprising:

- operating a monitoring circuit to examine packets communicated to the router and to provide network information associated with selected ones of the examined packets (paragraph [0023]);
- processing the provided network information (paragraph [0117]);
- including the processed network information into of one or more packets (paragraph [0119]);

- transmitting the one or more packets along the network to at least one node coupled to the network, wherein the at least one node is outside of the management system (paragraph [0121]).

3. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. (hereinafter "Burt", US Patent Publication Application 2005/0005202 A1) in view of Aaron et al. (hereinafter "Aaron", US Patent Publication 2003/0188191 A1) and in further view of Applicant's Admitted Prior Art (AAPA).

As per claim 3, Burt, in view of Aaron, does not explicitly disclose the router of claim 2 wherein the network management system protocol is selected from a group consisting of a Simple Network Management Protocol, a Common Management Information Protocol and a Common Object Request Broker Architecture protocol.

However AAPA teaches communication with management use one various standard protocols such as Simple Network Management Protocol (SNMP), the Common Management Information Protocol (CMIP), and the Common Object Request Broker Architecture (COBRA) protocol (page 2, lines 25-29).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's network management system protocol is selected from a group consisting of a Simple Network Management Protocol, a Common Management Information Protocol and a Common Object Request Broker Architecture protocol in Burt's router in order to report network statistics and any event communications from the router to the management system (AAPA, page 2, lines

Art Unit: 2457

24-25).

As per claim 4, Burt, in view of Aaron, does not explicitly disclose the router of claim 2 wherein the management system comprises a network management system/element management system.

However, AAPA teaches as known in the art, the network management system (NMS) is a defined hierarchy. The management system typically includes the NMS at an upper level, below which are several element management system (EMS) nodes (page 2, lines 5-6, 9-10).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate AAPA's management system comprises a network management system/element management system in Burt's router in order to collect information about and manage functions within each managed router (AAPA, page 2, lines 11-12).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. (hereinafter "Burt", US Patent Publication Application 2005/0005202 A1) in view of Aaron et al. (hereinafter "Aaron", US Patent Publication 2003/0188191 A1) and in further view of Beyda (US Patent Publication Application 2004/0139179 A1).

As per claim 5, Burt, in view of Aaron, does not explicitly disclose the router of claim 1, wherein a set of transmitted one or more packets correspond to a set of packets

received at the router; and

wherein the circuitry for transmitting is for transmitting the one or more packets within 60 seconds of when the router receives the set of packets received at the router.

However, in an analogous art, Beyda teaches the router monitoring operational parameters and generating reports every 10 or 60 seconds to reflect the status (paragraphs [0026-0027]).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate Beyda's transmitting the one or more packets within 60 seconds of when the router receives the set of packets received at the router in Burt's router in order to indicate the health of the router and the bandwidth utilization (Beyda, paragraph [0026]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Barbara N Burgess/  
Examiner, Art Unit 2457

Barbara N Burgess  
Examiner  
Art Unit 2457

December 6, 2008

/ARIO ETIENNE/  
Supervisory Patent Examiner, Art Unit 2457